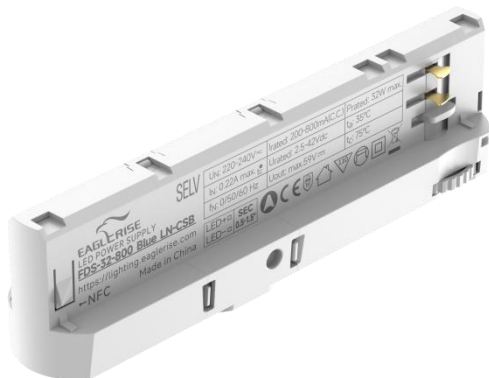


32W Blue Dimming FDS power supply



■ Approve

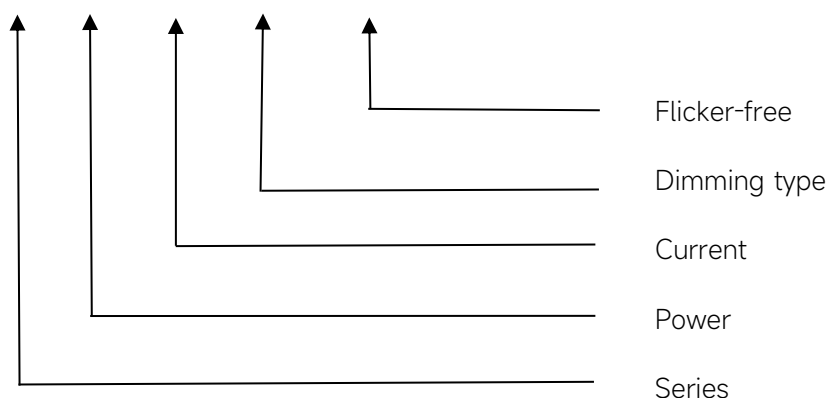


◆ Description

FDS-32-800 Blue LN-CSB is a 32W constant current LED driver with 200 to 800mA output current and a forward voltage range from 2.5 to 42Vdc. The output current is adjustable by NFC. With it's dimensions from 162x31x42mm it is easy to integrate in Ceiling light and down light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code

FDS-32-800 Blue LN-CSB



Features

- For luminaries of protection Class II, SELV, Independent
- Input Voltage: 220-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor: > 0.95
- Efficiency: 89%
- Suitable for emergency lighting acc. to EN 50172
- EOfi=15%
- Support casambi Dimming
- Adjustable Output Current with NFC
- 5 years warranty

Applications

- Track spot light

◆ Specification

Output	Constant Current (mA)	200-800mA
	Voltage Range(VDC)	2.5-42VDC
	Unload voltage Max.(VDC)	59VDC
	Current Accuracy	±5%
	² Output current ripple(≤120Hz)	±3%
	SVM	≤0.4@Full Load
	P _{st}	≤1@Full Load
	Efficiency(Typ.)	89%
	EOFI	15%
Input	Rated input voltage(V)	220-240V
	Range of input voltage(VAC)	198-264VAC
	Maximum voltage	300VAC@1 h maximum,unit might not operate in this abnormal condition
	Range of input voltage(VDC)	176-280VDC
	Frequency(Hz)	0/50/60 Hz
	Displacement Factor	≥0.9@full load, 230Vac
	Power Factor	>0.95@full load, 230Vac
	Input Current max	0.22A max
	Start-up time	< 0.5S
	Switch over time(AC/DC mode)	< 0.4S
	Standby Power	≤0.3W, @230Vac
	Network Standby Power	≤0.3W,@230Vac
	THD (Typ.)	<10%@full load,230Vac
Dimming	Dimming	YES
	Dimming mode	Bluetooth
	Dimming depth	5mA@200-500mA, 1%@500-800mA
	Dimming current range	1-100%
Protection	Over Load Protection	103-120% YES/Latch off
	Over Voltage Protection	59VDC YES/Latch off
	Short circuit Protection	YES/Latch off
	Over Temperature Protection	YES/Auto Resume
capability	Surge capability (L-N)	1KV
	Surge capability (L/N-Ground)	2KV
Environment	Operating Temperature	-20°C~+35°C
	Humidity	20%-90%RH
	T _c	75°C
	Storage Temperature	-40°C~+80°C

	Life time	> 50000h,@TC=70°C
	Noise	≤25dB(A)@20cm
Surface	Dimension	162X31X42mm
	material	PC
Standards	Safety	GB19510. 1, GB19510. 14;IEC61347- 1, IEC61347-2- 13;AS/NZS 61347- 1, AS/NZS 61347-2- 13;AS 61347.2.13;EN62384;
	EMC	GB/T17743, GB17625. 1;EN55015, EN61000-3-2, EN61000-3-3, EN61547;EN55015, EN61000-3-2, EN61000-3-3, EN61547,EN 62493;EN61000-4-5;EN61000-4-2,3,4,5,6,8,11, EN61547
	Energy Efficiency	Erp2.0 EU 2019/2020
	RoHS	RoHS (2011/65/EU) (EU)2015/863
Note	1.All parameters not specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature. 2.Ripple & Noise are measured at 20MHz of bandwidth. 3.The DC input for this product is only used for emergency lighting and applies to functional and safety requirements, EMC is not considered. 4.EL compatible with IEC 61347-2-13 Annex J, compatible with EN 60598-2-22 emergency lighting fixtures, compatible with EN 50172 central battery system applications. 5.All Eaglerise power supply are complied with EMI regulations. Since they are belong to component and will be installed inside system enclosure. When they are integrated into a system, the EMI characteristics of the system must be re-verified again.	

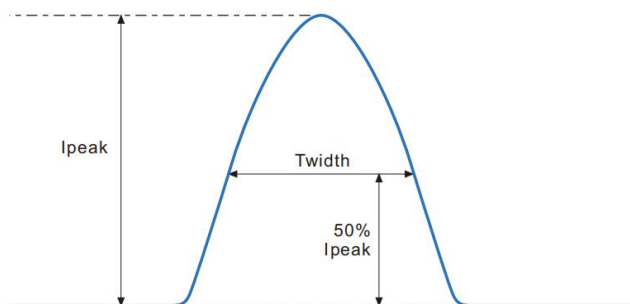
◆ Parameter

Number	Output			
	Current (mA)	Voltage (VDC)	Voltage No load (VDC)	Power (W)
*1	200mA	2.5-42VDC	59	12.6
2	...	...	...	...
3	600mA	2.5-42VDC	59	25.2
4	...	...	...	...
5	800mA	2.5-40VDC	59	32

* Factory default

◆ Inrush Current

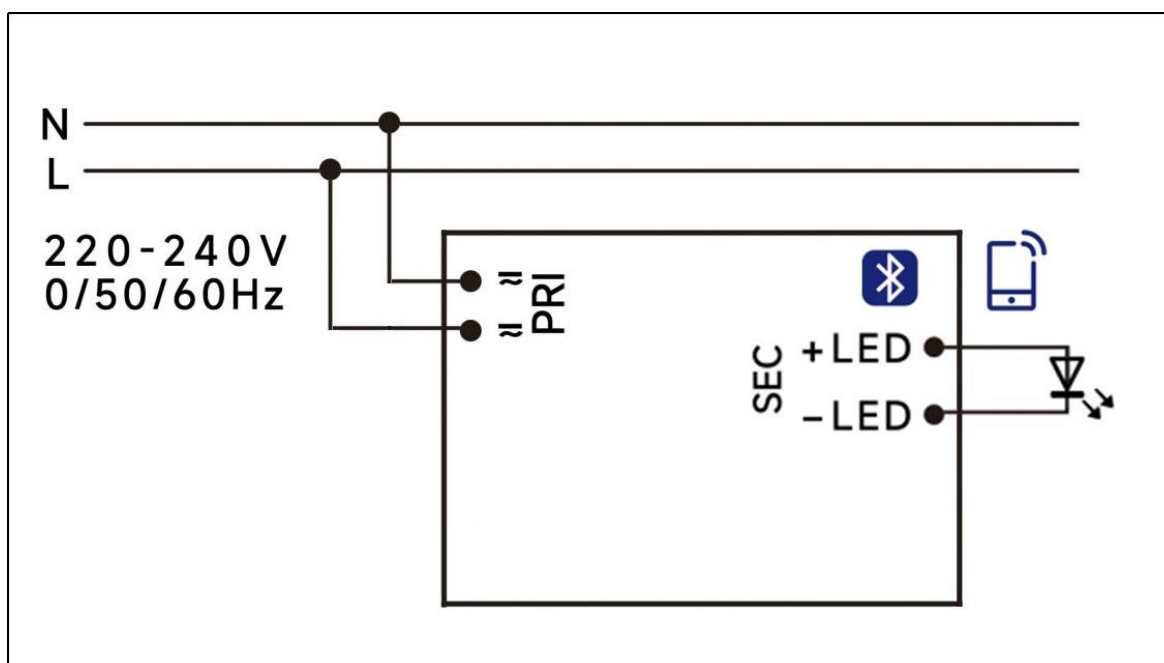
I_{peak}	Twidth	B10	B16	B20	C10	C16	C20
4.46A	32μs	36pcs	58pcs	72pcs	36pcs	58pcs	72pcs



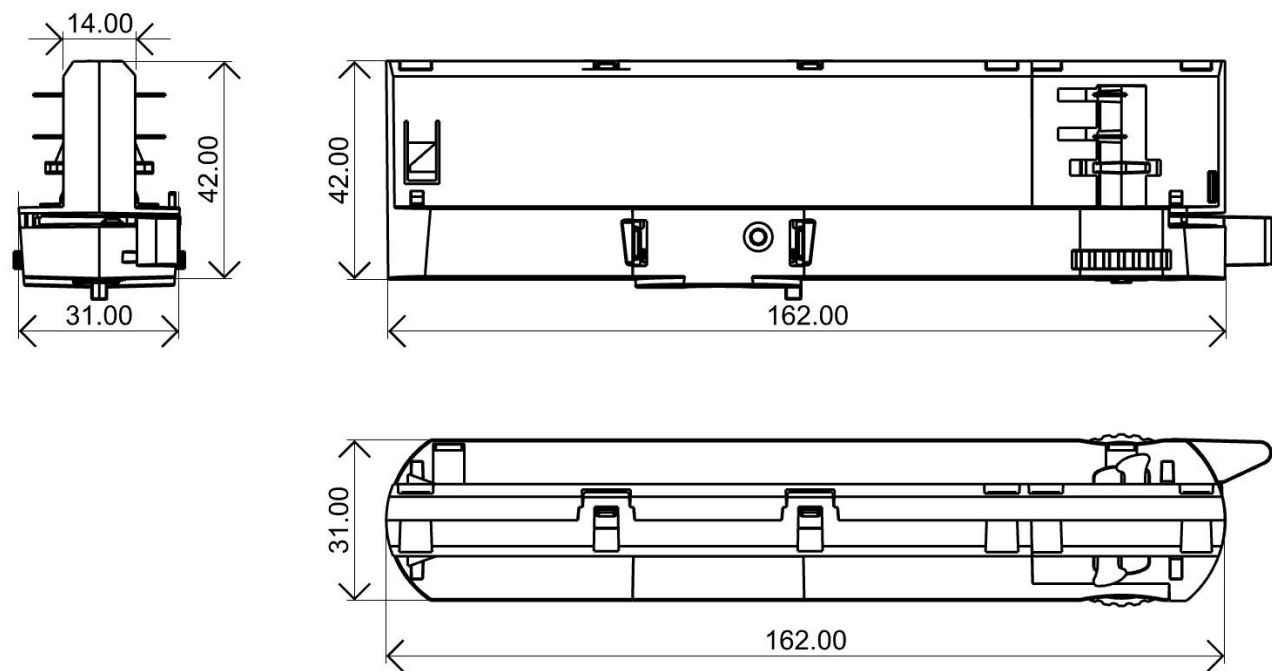
Remarks:

- 1.The number of drives mounted under different MCBs in the table is the maximum value. Please do not exceed this number during installation.
- 2.Different brands and models of miniature circuit breakers, the number of drives mounted will be slightly different.

◆ Wiring diagram



◆ 2D diagram



◆ Wiring & Connections

Specification item		Value (Unit)
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	8...9mm

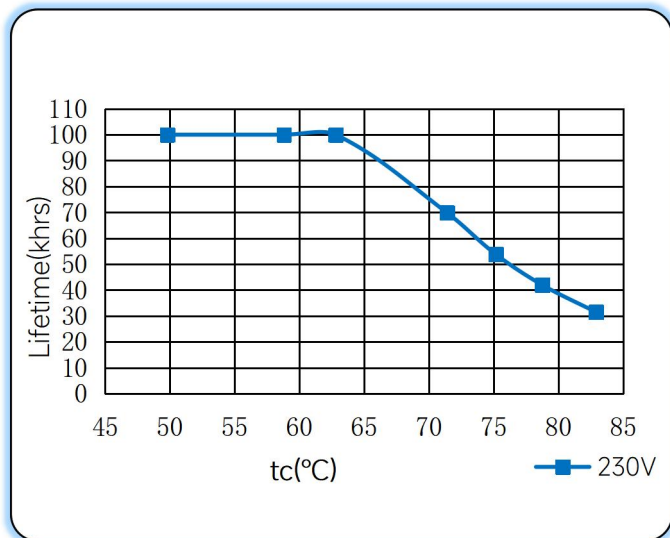
Note:Solid wire is risky to use on an angled terminal.Stranded wire is recommended for this kind of use.

◆ Matching brand

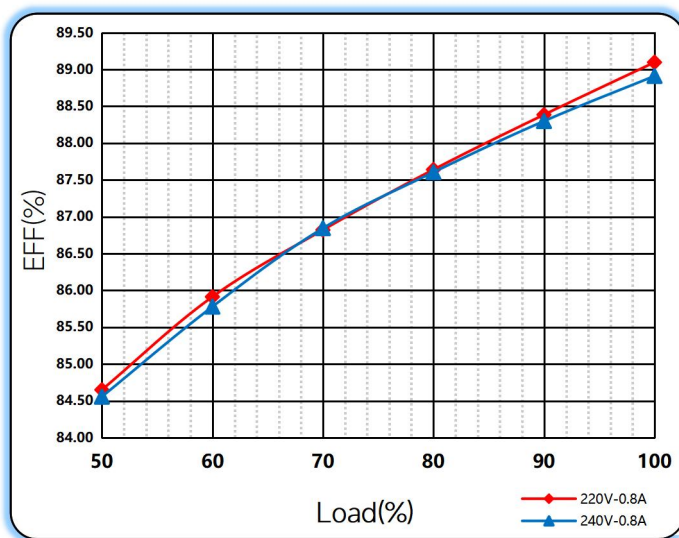
Brand	AAG
	ERCO
	Unipro
	Powergear
	GLOBAL

◆ Curve for FDS-32-800 Blue LN-CSB, $I_o=800\text{mA}$

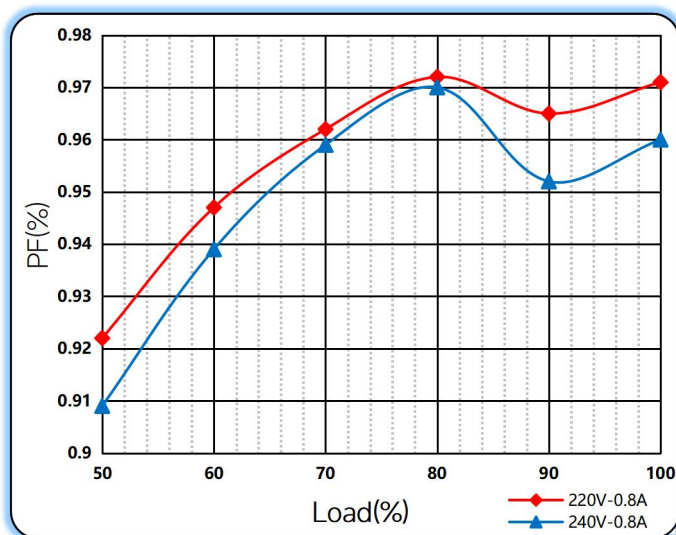
Lifetime vs. Temperature Curve



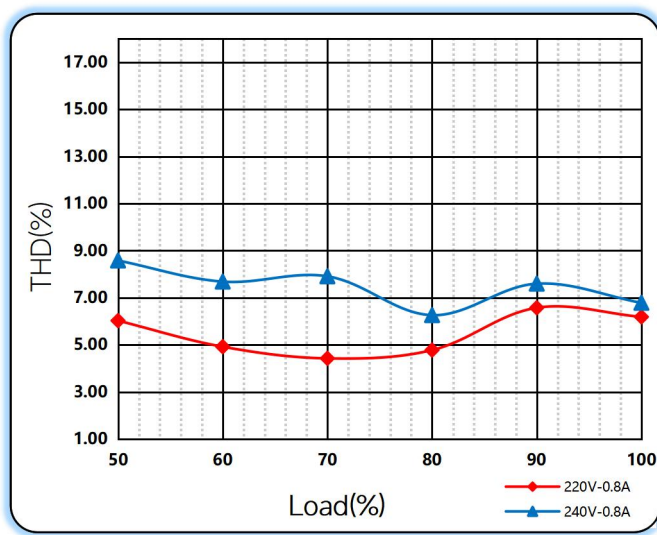
Efficiency vs. Load



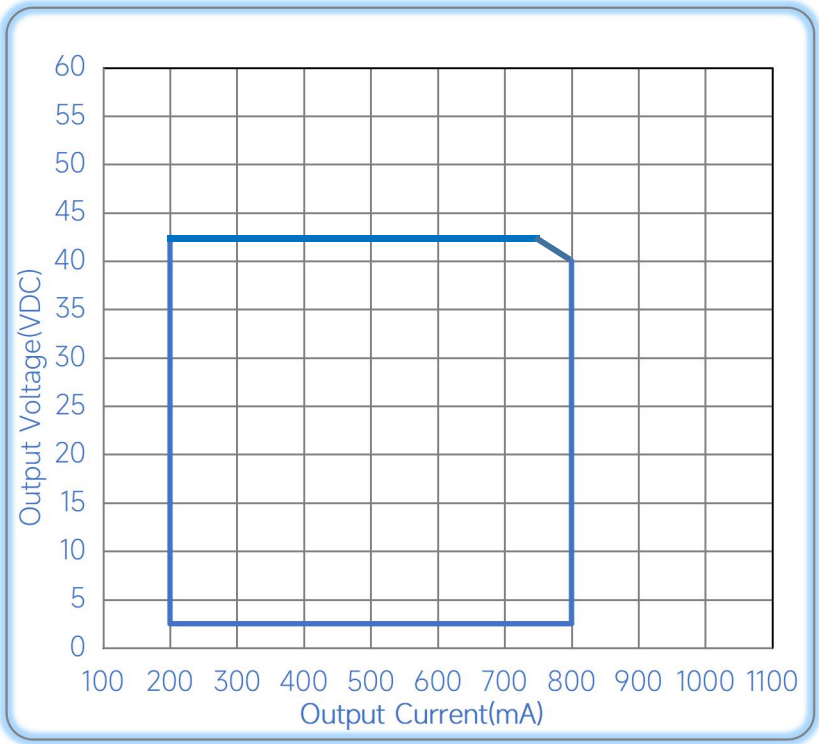
Power Factor Characteristics



THD vs. Load



◆ Operating window



Operating Window 100%

Minimum dimming current

◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2024/10/14
Curve			B	2025/7/8

Remark:The final interpretation of the contents of the specification belongs to Eaglerise Electric & Electronic (China) Co., Ltd.

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